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EXAMINER

KURIAN, ROSHNI

ART UNIT

PAPER NUMBER

2829

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,526

Applicant(s)

GREGOREC ET AL.

Examiner

Roshni Kurian

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-9 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other:

Claim Objections

1. Claim 12 is objected to because of the following informalities: The claim does not end with a "." . Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 1-6, 10, and 12-13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The term "eccentric" in claims 1, 10, and 12 is a relative term which renders the claim indefinite. The term "eccentric" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

For purposes of examination, no patentable weight is being given to the term "eccentric".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lauby et al and further in view of Kim (US 5896096).

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- Regarding Claim 1, Lauby et al discloses an electronic test instrument comprising: a probe (Figure 6, 12) for acquiring an AC voltage input signal; and a converter circuit (Figure 6, 108) connected to the probe for converting the AC voltage signal to a DC control level voltage proportional to the AC voltage signal. However, Lauby et al does not disclose a motor that creates vibrations in response to the voltage level. Kim discloses an apparatus which utilizes a vibrating indicator wherein a motor (Figure 1, 18), when activated, creates a vibration proportional to the voltage input signal (Column 3, lines 32-34). Therefore, it would have been obvious to one of ordinary skill in the art to modify the test instrument taught by Lauby et al in view of Kim to incorporate a vibrator indicator so as to alert the user to the state of the apparatus.

- Regarding Claim 2, Kim discloses an apparatus having a sequential vibrating mode wherein the motor drive and switching regulator circuit (Figure 1, 17) connected between the converter circuit and the motor (Figure 1, 18), the motor drive and switching regulator circuit being responsive to the voltage level.

- Regarding Claim 5, Lauby et al, in Figure 6, discloses an electronic test instrument further comprising: a reference voltage (Column 6, line 28); a comparator (102) that provides an on signal when the DC control level voltage is greater than the reference voltage; and a gate circuit (102) responsive to the on signal to permit activation of the indicator. Lauby et al does not teach that vibrating indicator can be utilized. However, Kim discloses an apparatus which utilizes a vibrating indicator wherein a motor (Figure 1, 18), when activated, creates a vibration proportional to the voltage input signal (Column 3, lines 32-34). Therefore, it would have been obvious to

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one of ordinary skill in the art to modify the test instrument taught by Lauby et al in view of Kim to incorporate a vibrator indicator so as to alert the user to the state of the apparatus.

- Regarding Claim 6, Lauby et al discloses an electronic test instrument comprising a clamp (Figure 4, 27) for engaging an AC line.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lauby et al (US 6043640) and Kim (US 5896096) as applied to claims 1-2 above, and further in view of Crass et al (US 5412312).

- Regarding Claim 3, neither Lauby et al nor Kim disclose an electronic test instrument comprising a square wave generator circuit. However, Crass et al discloses a meter apparatus wherein a square wave pulse is generated in response to the input voltage (Column 4, lines 44-47). Therefore it would have been obvious to one of ordinary skill in the art to modify the test instruments disclosed by Lauby et al in view of Kim and in further view of Crass et al to incorporate Crass' square wave pulse so as to drive the indicator (Column 4, lines 44-49).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lauby et al (US 6043640) and Kim (US 5896096) as applied to claims 1-2 above, and further in view of Hastings et al (US 4634944).

- Regarding Claim 4, neither Lauby et al nor Kim disclose that the motor drive and switching regulator circuit includes a battery and a chopper circuit. However,

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Hastings et al, in Figure 1, discloses a motor control circuit comprising a battery (B+, B-) and chopper circuit (40). Therefore it would have been obvious to one of ordinary skill in the art to modify the test instrument taught by Lauby et al in view of Kim and in further view of Hastings et al to include the use of a battery and chopper circuit so as to monitor battery voltage and maintain the motor.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shirai (US 5349289) and further in view of Luebke et al (US 5877618).

- Regarding Claim 11, Shirai, in Figure 1, discloses an electronic test instrument, comprising: a housing (12) having first (14a) and second (14b) jaws at one end of the housing forming a clamp (14), at least one of the jaws being movable into and out of engagement with the other jaw; and an electrical circuit in the housing in electrical connection with the sensor, the circuit being operable to indicate the presence of a voltage (column 3, lines 15-19). However Shirai does not disclose a blade with an embedded sensor protruding from one of said jaws. Luebke et al discloses a hand held non-contact voltage tester comprising a blade-like probe (Figure 6, 26) which senses the presence of a voltage (Column 4, line 31). Therefore it would have been obvious to one of ordinary skill in the art to modify the apparatus disclosed by Shirai in view of Luebke to include the blade-like probe tip with sensor so as to obtain a more precise voltage measurement.

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9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shirai (US 5349289) in view Luebke et al (5877618) as applied to claim 11 above, and further in view of Kim (5896096).

- Regarding Claim 12, Shirai, in Figure 3, discloses an electronic test instrument further comprising: a probe (14) for acquiring an AC voltage input signal; a converter (36a) circuit connected to the probe for converting the AC voltage signal to a DC control level voltage proportional to the AC voltage signal. However, neither Shirai nor Luebke et al disclose a motor that creates vibrations in response to the DC voltage level. Kim discloses an apparatus which utilizes a vibrating indicator wherein a motor (Figure 1, 18), when activated, creates a vibration proportional to the voltage input signal (Column 3, lines 32-34). Therefore, it would have been obvious to one of ordinary skill in the art to modify the test instrument taught by Shirai in view of Luebke et al and in further view of Kim to incorporate a vibrator indicator so as to alert the user to the state of the apparatus.

Allowable Subject Matter

10. Claims 7-9 are allowed.

11. Claims 10 and 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Reasons for Allowable Subject Matter

13. The following is a statement of reasons for the indication of allowable subject matter:

- Claims 7-10 and 13-14, recite, inter alia, a second converter circuit for converting the AC non-fundamental signal to a distortion signal which is proportional to the total distortion and noise in the AC voltage input signal; and a comparator circuit for comparing the distortion signal to the DC equivalent reference voltage.

The art of record does not disclose the above limitations, nor would it be obvious to modify the art of record so as to include the above limitations.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roshni Kurian whose telephone number is (703) 308-7607. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (703) 308-1680. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7607 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-4900.

Roshni Kurian
March 22, 2002

 3-22-02
MICHAEL J. SHERRY
PRIMARY EXAMINER